

What is claimed is:

1. A vacuum valve comprising:

a valve body with a valve opening;

a valve plate which is movable between an open position in which it lies next to the valve opening and releases the valve opening and a closed position in which the valve opening is covered; and

a diaphragm plate which is movable between a passive position, in which it lies next to the valve opening and releases the valve opening, and an active position in which it partially covers the valve opening;

wherein the vacuum valve has a completely open state in which the valve plate is in its open position and the diaphragm plate is in its passive position, a completely closed state in which the valve plate is in its closed position and is sealed relative to the valve body, and a partially closed state in which the valve plate is in its open position and the diaphragm plate is in its active position, wherein the vacuum valve has a reduced cross section compared to the completely open state.

2. The vacuum valve according to claim 1, wherein the diaphragm plate has at least one opening.

3. The vacuum valve according to claim 1, wherein the diaphragm plate extends in its active position along its entire circumference beyond the cross-sectional area of the valve opening considered in the direction of the axis of the valve opening.

4. The vacuum valve according to claim 1, wherein the valve opening is formed by a through-channel through the valve body and a recess proceeds from the through-channel and extends to varying distances in all directions perpendicular to the axis of the valve opening.

5. The vacuum valve according to claim 4, wherein the diaphragm plate

extends in its active position along its entire circumference into the recess of the through-channel.

6. The vacuum valve according to claim 4, wherein the diaphragm plate lies completely in the recess of the through-channel in its passive position.

7. The vacuum valve according to claim 4, wherein the valve plate extends along its entire circumference into the recess of the through-channel in its closed position.

8. The vacuum valve according to claim 4, wherein the valve plate lies completely in the recess of the through-channel in its open position.

9. The vacuum valve according to claim 1, wherein the valve plate can be moved between its open position and a position in its plane in which it completely covers the valve opening but is raised from the valve body.

10. The vacuum valve according to claim 9, wherein the valve plate is swivelable around a swiveling axis extending perpendicular to its plane between its open position and its position in which it completely covers the valve opening but is raised from the valve body.

11. The vacuum valve according to claim 9, wherein the valve plate is displaceable in a straight line between its open position and its position in which it completely covers the valve opening but is raised from the valve body.

12. The vacuum valve according to claim 1, wherein the diaphragm plate is movable in its plane between its passive position and its active position.

13. The vacuum valve according to claim 12, wherein the diaphragm plate is swivelable around a swiveling axis extending perpendicular to its plane between its passive position and its active position.

14. The vacuum valve according to claim 12, wherein the diaphragm plate is displaceable in a straight line between its passive position and its active position.

15. The vacuum valve according to claim 1, wherein the size of at least one opening of the diaphragm plate is adjustable.

16. The vacuum valve according to claim 1, wherein the valve plate is movable into an intermediate position between its open position and closed position in which it at least partially covers at least one opening of the diaphragm plate in its active position.